

REMARKS/ARGUMENTS

Claims 26-49 are active in this application.

SUPPORT FOR THE AMENDMENTS

Claim 26 replaces Claim 1 and is supported by original claims 1 and 11 and the specification on page 11 and Example 6.

Claim 27 replaces Claim 2.

Claim 28 replaces Claim 3.

Claim 29 replaces Claim 12.

Claim 30 replaces Claim 13.

Claims 31 and 32 replaces Claim 14.

Claim 33 replaces Claim 15.

Claim 34 replaces Claim 16.

Claim 35 is supported by the specification on page 12, lines 16-18.

Claim 36 is supported by the specification on pages 23-25, examples 7, 8 and 9.

Claim 37 is supported by the specification on page 22 (example 5) and page 10.

Claim 38 is supported by the specification on page 11.

Claims 39-49 replace Claims 20-25.

No new matter is added.

THE REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-3, 11-14 and 16 have been rejected in view of Yoshihiro or Tatsuo combined with Rijpers; and Claims 15 and 20-25 have been rejected in view of these same publications along with Iida. The rejections are obviated in light of the cancellation of these claims. However, as these rejections apply to the claims as presented herein, the rejections are respectfully traversed.

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The present claims provide a transparent substrate comprising an antireflection coating made of a multilayer stack having alternating thin layers of high and low refractive indices, comprising:

- (a) at least one high-index thin multilayer having a refractive index value higher than 1.9 and lower than 2.45, comprising
  - at least one titanium oxide layer and at least one additional high index layer having a refractive index of at most 2.3 and comprising a material selected from the group consisting of zinc oxide, silicon nitride, aluminum nitride, and a slightly conducting material having doped metal oxide; or
  - a trilayer with alternatively one titanium oxide layer, one tin oxide layer and one titanium oxide layer.
- (b) low refractive index layers having a refractive index of from 1.30 to 1.65.

The claimed transparent substrate is not described in the prior art cited by the office for the following reasons.

Yoshihiro describes a transparent substrate (glass 11) having at least one surface with an antireflection coating made of a multilayer stack having alternating thin layers of high and low refractive indices. The Yoshihiro high-index thin multilayer (14a, 14b) has a refractive index value higher than 1.9 and lower than 2.45 ( $n=1.9$  to  $2.2$ ), which is also composed of at least one titanium oxide layer (see 14a  $\text{TiO}_2/2.35$  at  $\sim 580\text{nm}$ ) and at least one additional high index layer having a refractive index of at most 2.3 and comprising  $\text{Ta}_2\text{O}_5/2.15$ ,  $\text{ZrO}_2/2.13$ ,  $\text{In}_2\text{O}_3$ ,  $\text{Pr}_6\text{O}_{11}$ ,  $\text{Nd}_2\text{O}_3$  (see 14b). Yoshihiro does not describe a high index layer with zinc oxide, silicon nitride, aluminum nitride or slightly conducting material having doped metal oxide or a trilayer with alternatively one titanium oxide layer, one tin oxide layer and one titanium oxide layer as claimed in Claim 26.

Neither Rijpers nor Iida provide any description to substitute the requisite components of the Yoshihiro film for a high index layer with zinc oxide, silicon nitride, aluminum nitride or slightly conducting material having doped metal oxide or a trilayer with alternatively one titanium oxide layer, one tin oxide layer and one titanium oxide layer as claimed in Claim 26. Therefore,

the present claims would not have been obvious in view of Yoshihiro with Rijpers and further in view of Iida and as such withdrawal of both rejections is requested.

Tatsuo discloses a transparent substrate (glass 1) having at least one surface comprising an antireflection coating made of a multilayer stack having alternating thin layers of high and low refractive indices. In the Tatsuo laminate at least one high-index "thin" multilayer (2a, 3a) has a refractive index value higher than 1.9 and lower than 2.45. This multilayer is composed of at least one titanium oxide layer ( $\text{TiO}_2$  3a, n being not disclosed and  $e=114$  nm see page 4) and at least one additional high index layer having a refractive index of at most 2.3 and comprising  $\text{In}_2\text{O}_3$  and  $\text{SnO}_2$  (see 2a mixture as defined ITO/2 and  $e=68\text{nm}$ , page 4). Tatsuo does not describe a high index layer with zinc oxide, silicon nitride, aluminum nitride or slightly conducting material having doped metal oxide or a trilayer with alternatively one titanium oxide layer, one tin oxide layer and one titanium oxide layer as claimed in Claim 26.

Neither Rijpers nor Iida provide any description to substitute the requisite components of the Tatsuo film for a high index layer with zinc oxide, silicon nitride, aluminum nitride or slightly conducting material having doped metal oxide or a trilayer with alternatively one titanium oxide layer, one tin oxide layer and one titanium oxide layer as claimed in Claim 26. Therefore, the present claims would not have been obvious in view of Tatsuo with Rijpers and further in view of Iida and as such withdrawal of both rejections is requested.

#### OBJECTIONS TO THE CLAIMS AND SPECIFICATION

The objections to the specification and claims have been addressed by amendment.

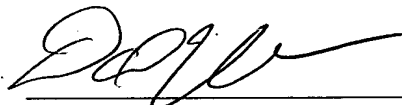
Application No. 09/761,765

Reply to Office Action of September 15, 2003

Applicants request allowance of this application. Early notice to this effect is also requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



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Norman F. Oblon  
Attorney of Record  
Registration No. 24,618

Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 08/03)

Daniel J. Pereira, Ph.D.  
Registration No. 45,518